

# Burlington Health District

## 2012 Behavioral Risk Factor Surveillance System Data

*Guidance • Support • Prevention • Protection*

VDH – Public Health Statistics  
May 2014

 **VERMONT**  
**DEPARTMENT OF HEALTH**

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## What is the Behavioral Risk Factor Surveillance System or BRFSS?

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey conducted annually among adults 18 and older. The Vermont BRFSS is conducted by the Vermont Department of Health (VDH) in collaboration with the Centers for Disease Control and Prevention (CDC). All U.S. states, Washington D.C. and several U.S. territories participate in the survey.

Typically between 6,000 and 7,000 Vermont adults are interviewed as part of the Vermont BRFSS each year. Vermont residents ages 18 and older are eligible for the survey. A Vermont resident is defined as someone living in the state for at least 30 days in a given calendar year. Adults living in institutions such as nursing homes, group homes, or prisons are not eligible for the survey.

The BRFSS survey includes questions on chronic disease prevalence (e.g. asthma diagnosis), risk behaviors (e.g. currently smoke), demographics (e.g. age, gender, race), health care access (e.g. have health insurance), and preventive behaviors and health screening (e.g. routine visits to a doctor or colorectal cancer screening).

Additional information can be found on the VDH and CDC websites:

- <http://healthvermont.gov/research/brfss.aspx>
- <http://www.cdc.gov/brfss/>

A report summarizing the 2012 statewide results from the Vermont BRFSS can also be found on the VDH website:

[http://healthvermont.gov/research/brfss/documents/summary\\_brfss\\_2012.pdf](http://healthvermont.gov/research/brfss/documents/summary_brfss_2012.pdf)

### Recent Changes to BRFSS Methodology

In 2011, the CDC implemented changes to the BRFSS weighting methodology in order to more accurately represent the adult population. Population weights are now calculated using iterative proportional fitting (or “raking”) methodology. This allows the weights to be calculated using smaller sample sizes, adjusts for more demographic variables, and incorporates cell phone interview data into estimates.

While these adjustments make the calculations more representative of the population, the changes in methodology also limit the ability to compare 2011 results to previous years. VDH's Center for Health Statistics recommends that comparisons between 2011 BRFSS data and earlier years be made with caution. Statistical differences between 2011 and earlier years may be due to methodological changes, rather than changes in opinion or behavior.

## Demographics of Burlington Health District\*

The next few pages describe the demographic makeup of Burlington Health District adults in 2011-2012.

Half of Burlington adults are female. More than two-thirds of adult Burlington residents are 25-64, with one in six ages 65 and older.

- Burlington residents are significantly more likely than Vermont adults overall to be 25-44 (33% vs. 29%) and less likely to be 65 and older (16% vs. 20%).

More than four in ten Burlington area adults has a college degree or higher.

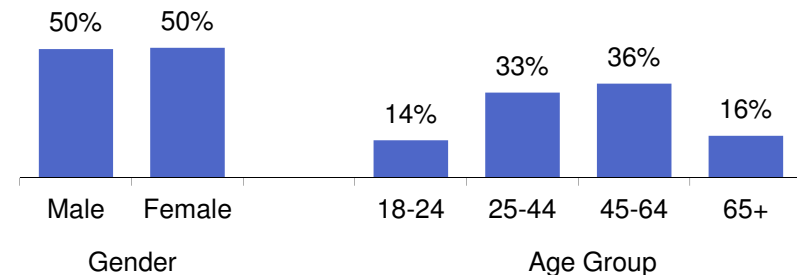
- Burlington adults are significantly more likely than Vermont adults overall to have a college degree or higher (42% vs. 31%) or some college education (32% vs. 29%) and less likely to have a high school degree or less (26% vs. 41%).

About six in ten Burlington adults lives in a home making \$50,000 or more annually, a significantly higher rate than that among Vermont adults (59% vs. 47%).

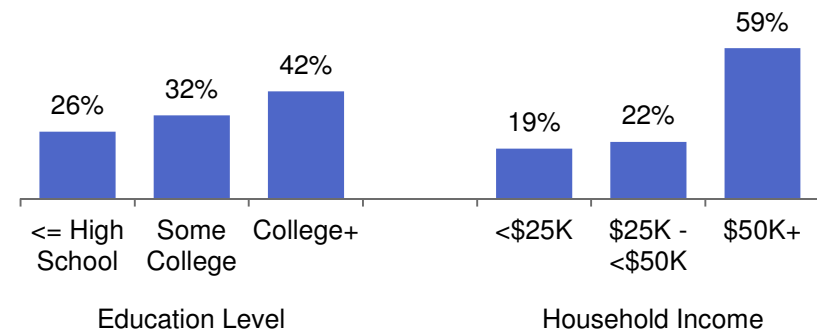
- Burlington adults are also significantly less likely than Vermont adults overall to live in homes making less than \$50,000 per year (41% vs. 53%).

Five percent of adults in the Burlington area and Vermont overall report being a racial or ethnic minority.

**Burlington Residents  
by Gender and Age**



**Burlington Residents  
by Socio-Economic Status**



\*See page 27 for a list of the towns included in the Burlington Health District.



## Demographics of Burlington Health District

Almost seven in ten Burlington adult residents are currently employed, while one in seven is retired. Ten percent said they are a student or homemaker, and four percent each said they are unable to work or unemployed.

- Burlington adults are significantly more likely than Vermont overall to be employed (68% vs. 63%). Conversely, they are less likely to be retired (14% vs. 17%).

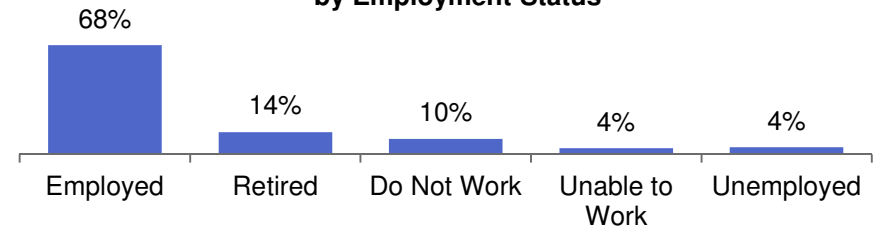
More than half of Burlington adults are married. About a quarter have never married, while twelve percent are divorced. Five percent each are widowed or part of an unmarried couple.

- Burlington adults are significantly less likely to be widowed than Vermont adults overall (5% vs. 6%).

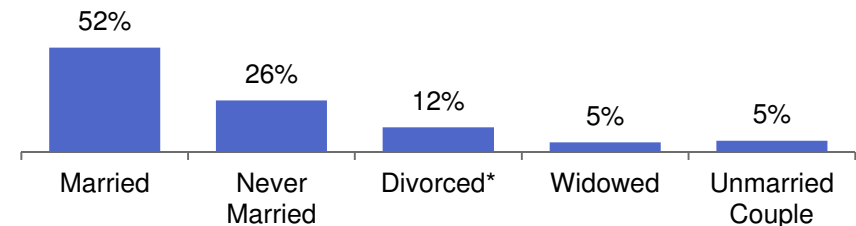
Two-thirds of adults in the Burlington area said there are no children less than 18 in their home. Five percent reported having three or more children.

- The number of children in the home reported by Burlington area adults was similar to that for Vermont overall.

**Burlington Residents  
by Employment Status**

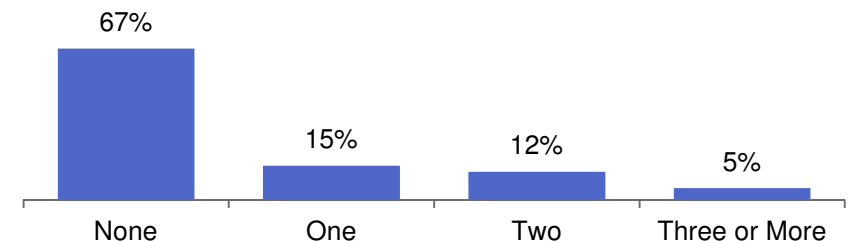


**Burlington Residents  
by Marital Status**



\*Includes those who reported their marital status as divorced or separated.

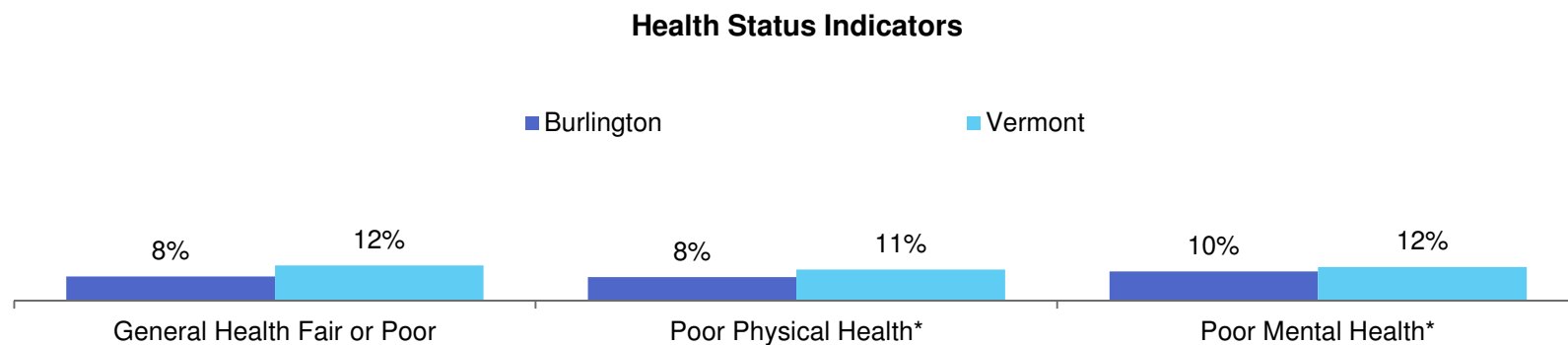
**Burlington Residents  
by Children in Household**



## Health Status Indicators

In 2011-2012, one in twelve Burlington area adults reported their general health is fair or poor. The same proportion reported having 14 or more poor physical health days in the last month, while one in ten said they had 14 or more days of poor mental health.

Burlington area adults are significantly less likely than Vermont adults to report fair or poor general health (8% vs. 12%) or at least 14 poor physical health days in the last month (8% vs. 11%).



\*Defined as 14+ poor physical or mental days in the last month.

## Health Status Indicators

Rates of fair or poor general health, poor physical health and poor mental health do not differ significantly by gender, among Burlington area adults.

Reported fair or poor general health and poor physical health increase with age, among Burlington adults.

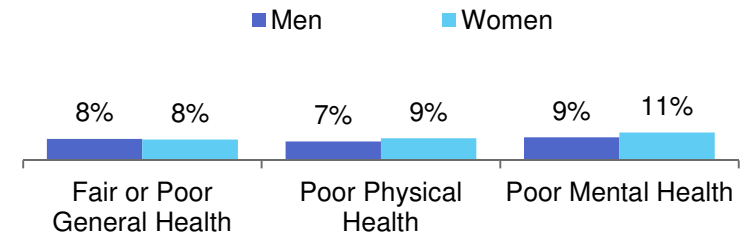
- Adults 65 and older are significantly more likely to report fair or poor health compared with those of younger ages.
- Adults 45-64 are also significantly more likely than those 18-44 to have fair or poor health (10% vs. 14%).
- Older adults, those 65 and older are also significantly more likely to report being in poor physical health compared to those 18-44 (14% vs. 5%).

There are no statistical differences in poor mental health by age.

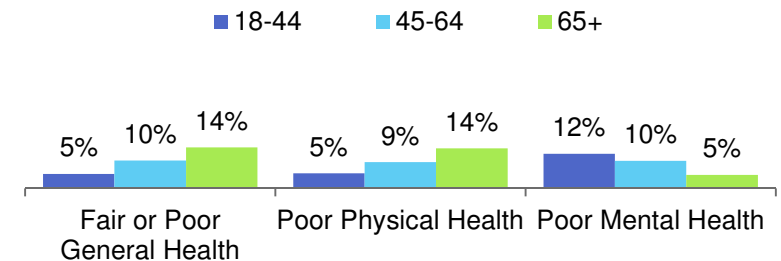
Poor health, regardless of the indicator, among Burlington area adults decreases with increasing annual household incomes.

- Adults in homes making less than \$25,000 per year are significantly more likely to report poor mental health than those in homes making \$25,000 or more.
- All differences for fair or poor general health and poor physical health are statistically significant.

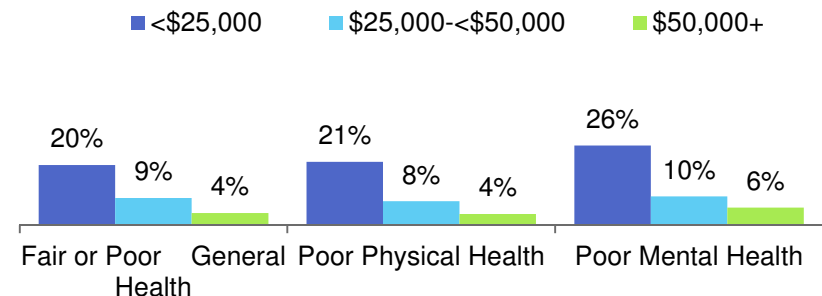
**Health Status Indicators by Gender  
Burlington Adults**



**Health Status Indicators by Age**



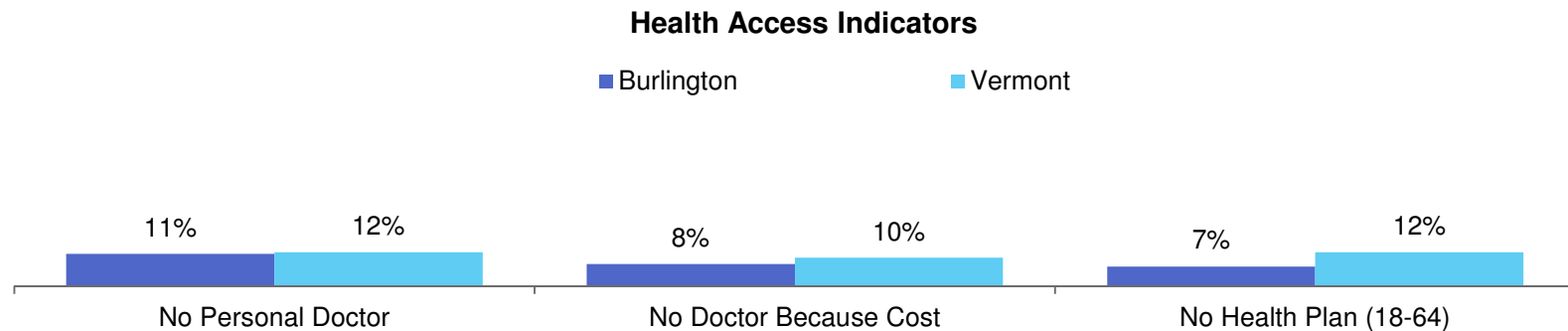
**Health Status Indicators by Income Level**



## Health Access Indicators

In 2011-2012, one in nine adults in the Burlington area said they do not have a personal doctor for health care. Fewer, one in twelve said they needed care in the last year but did not seek it due to the cost. Among Burlington area adults ages 18-64, seven percent said they do not have health insurance.

Burlington area adults report a significantly lower rate of not seeing a doctor due to cost when compared with Vermonters overall (8% vs. 10%). The proportion of adults 18-64 without a health plan is also significantly lower than that for Vermont (7% vs. 12%).





## Health Access Indicators

Burlington area men are significantly more likely than women to report not having a personal doctor (17% vs. 6%).

Among Burlington area adults, there are no statistically significant differences by gender in delaying care because of cost or not having a health plan.

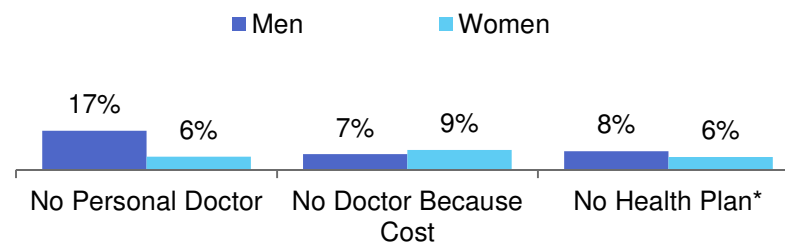
Poor health care access decreases with increasing age.

- Burlington adults 18-44 are significantly more likely than those 45 and older to not have a personal doctor.
- Those 18-64 are also significantly more likely than those 65 and older to report delaying care due to cost.
- Adults 18-44 are significantly less likely to have a health plan, compared with those 45-64 (9% vs. 4%).

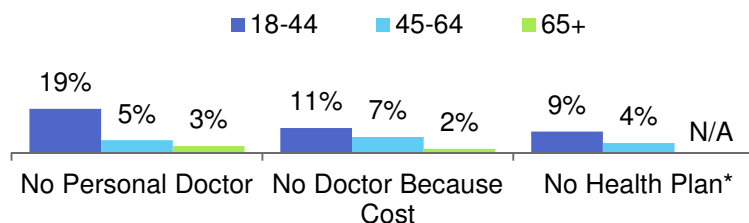
Adults in the Burlington area who have higher annual household incomes are less likely to report poor health care access, regardless of the indicator.

- Adults living in homes with the highest incomes, \$50,000 or more, are significantly less likely to not have a doctor than those in homes with less income.
- Adults in homes making \$25,000 or more are significantly less likely to delay care because of cost as compared with those in homes with less income.
- Those adults in homes making less than \$50,000 per year are significantly more likely to not have health insurance than those in homes making \$50,000 or more.

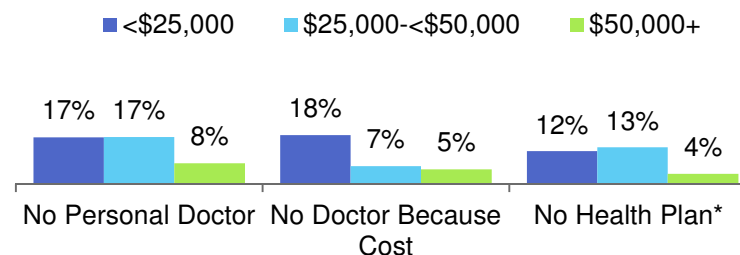
**Health Access Indicators by Gender  
Burlington Adults**



**Health Access Indicators by Age**



**Health Access Indicators by Income Level**



\*Limited to adults 18-64.

## Disability

One fifth of Vermont adults reported having a disability (21%) in 2012. This is the same proportion reported among adults in the Burlington area.

- Disability was defined as having activity limitations due to physical, emotional or mental problems OR any health problem that requires use of special equipment.

Men and women in the Burlington area report being disabled at statistically similar rates.

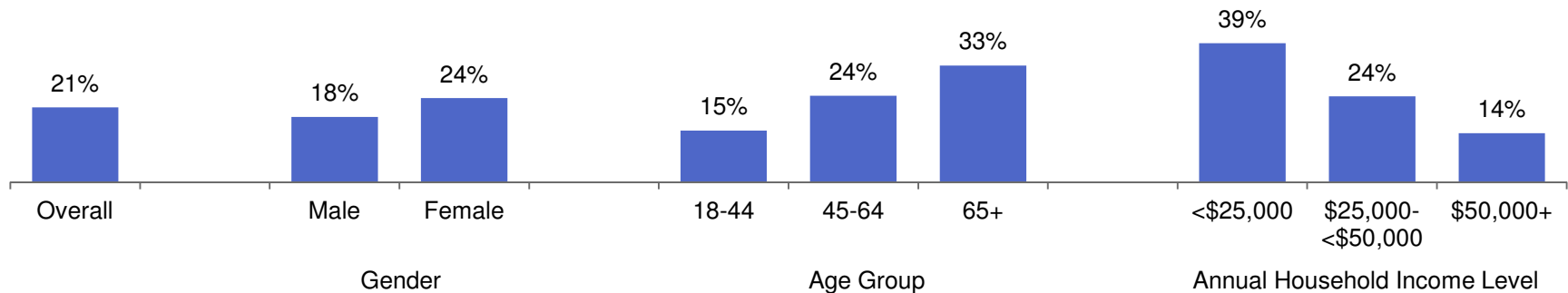
Reported disability among Burlington adults increases with increasing age.

- All differences by age are statistically significant.

Burlington area adults with lower annual household incomes are more likely to be disabled.

- All differences by annual household income are statistically significant.

**Disability, Overall and by Sub-groups  
Burlington Adults**



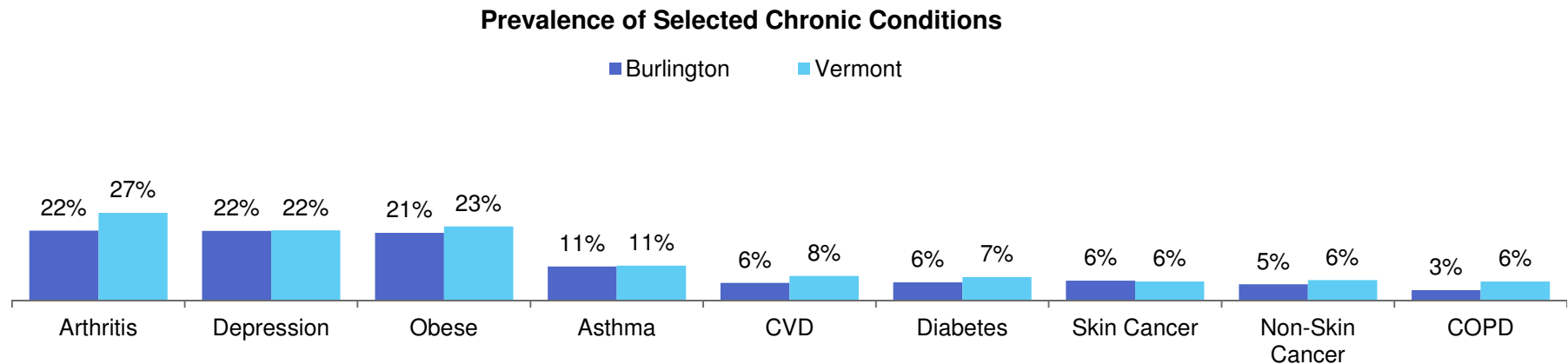
## Chronic Conditions

Burlington area adults reported statistically lower rates of arthritis, cardiovascular disease (CVD), diabetes and chronic obstructive pulmonary disease (COPD) when compared with Vermont adults.

- Less than a quarter of adults in the Burlington area reported having arthritis (22%); 27% of Vermont adults reported the same.
- Six percent of Burlington adults each said they have CVD and diabetes, significantly lower than the proportions among Vermont adults (8% CVD and 7% diabetes).
- Less than one in twenty (3%) adults living in the Burlington area have COPD. This is significantly lower than the 6% among Vermont adults overall.

The prevalence of obesity among Burlington area adults, ages 20 and older, is also significantly lower than that among Vermont adults of the same age. Twenty-one percent of Burlington adults reported being obese, compared with 23% of Vermont adults.

Burlington adults reported similar rates of each of the following chronic conditions as compared with Vermont adults overall: depressive disorders, asthma, skin cancer, and non-skin cancers.



Obesity data is limited to adults 20 and older and is age-adjusted to the U.S. 2000 population.

## Chronic Conditions

Among Burlington area adults, a diagnosis of arthritis, a depressive disorder and asthma are all significantly higher among females than males.

- A quarter of females (26%) each report arthritis and a depressive disorder, compared with 17% of males.
- Fourteen percent of females said they have asthma versus only 8% of males.

Conversely, Burlington area males are significantly more likely than females to report being obese (25% vs. 17%).

Arthritis prevalence among Burlington adults increases with increasing age.

- All differences in arthritis by age are statistically significant.

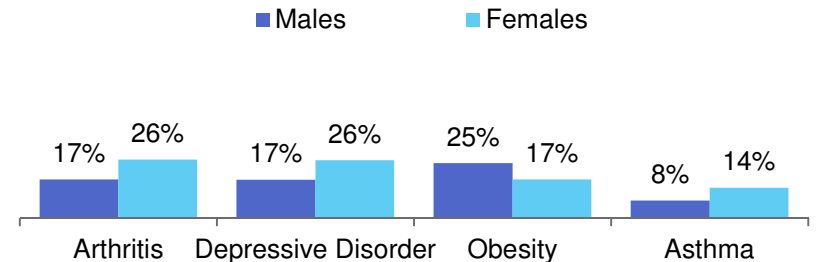
Obesity is also significantly less likely to be reported among younger adults, compared with those 45-64 (18% vs. 26%).

There are no differences in depressive disorders and asthma by age.

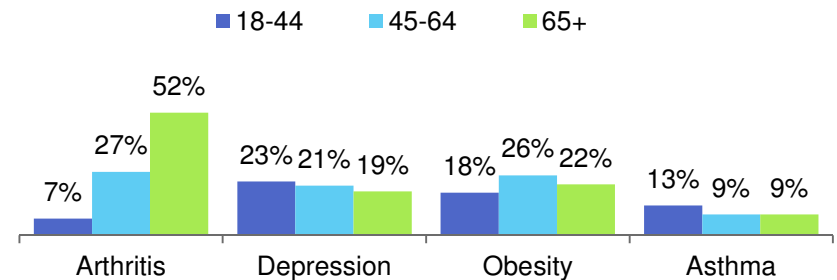
The prevalence of arthritis, depressive disorders, obesity, and asthma among Burlington adults all decrease as reported annual household income increases.

- Those in homes making \$50,000 or more per year are less likely to report arthritis, depressive disorders, and obesity than those in homes making less.
- Adults in homes with incomes of at least \$50,000 annually are significantly less likely than those in homes making less than \$25,000 per year to report having asthma.
- Adults in homes making \$25,000 to \$49,999 are also significantly less likely to report a depressive disorder than those in homes making less than \$25,000.

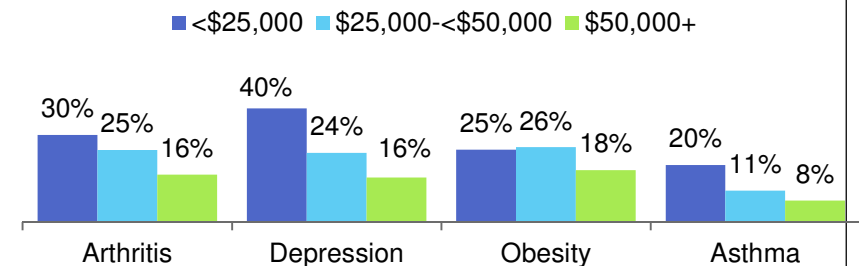
**Chronic Conditions by Gender  
Burlington Adults**



**Chronic Conditions by Age**



**Chronic Conditions by Income Level**



Note: Obesity data are for adults 20 and older and, except that by age, are age adjusted to U.S. 2000 standard population.

## Chronic Conditions

There are no statistically significant differences by gender for the prevalence of cardiovascular disease, diabetes, and COPD.

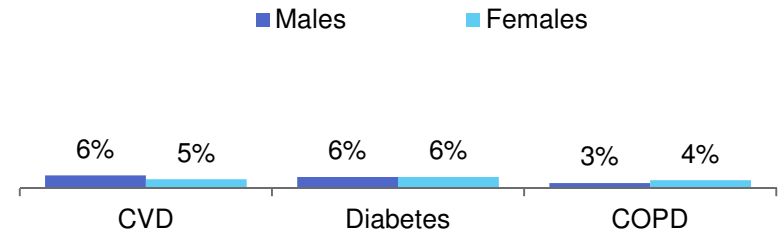
Reported cardiovascular disease, diabetes and COPD among Burlington area adults all increase as age increases.

- All differences by age for cardiovascular disease and diabetes are statistically significant.
- Burlington adults 65 and older are significantly more likely to report COPD than those 45-64.

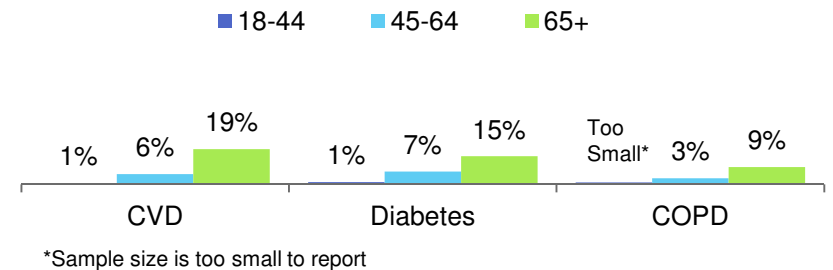
Burlington area adults living in homes with less income are more likely to say they have a cardiovascular disease, diabetes, and COPD.

- Those in homes making less than \$25,000 per year are significantly more likely than those in homes with more income to report having cardiovascular disease.
- Adults in homes making less than \$50,000 per year, are significantly more likely than those in homes making at least \$50,000 per year to have diabetes and COPD.

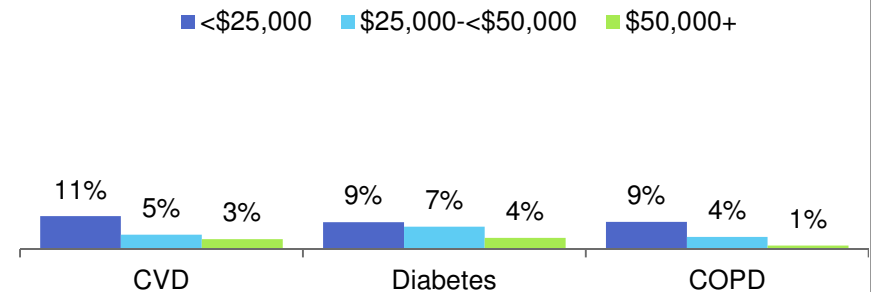
**Chronic Conditions by Gender  
Burlington Adults**



**Chronic Conditions by Age**



**Chronic Conditions by Income Level**



## Chronic Conditions

Among Burlington area adults, skin cancer and non-skin cancers are both significantly more likely to be reported by females than males.

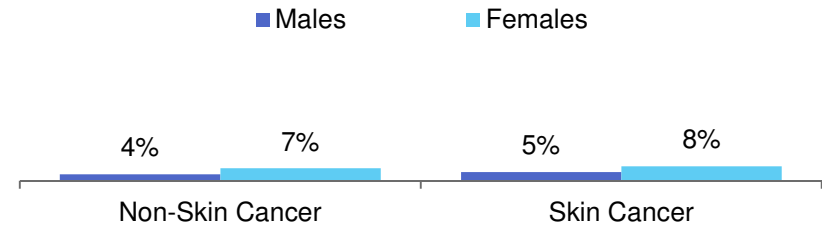
- Seven percent of Burlington females reported ever being diagnosed with a non-skin cancer, compared with only 4% of males.
- One in twelve Burlington area females (8%) have ever been diagnosed with skin cancer, compared with five percent of males.

The prevalence of both skin cancer and non-skin cancers increases with increasing age.

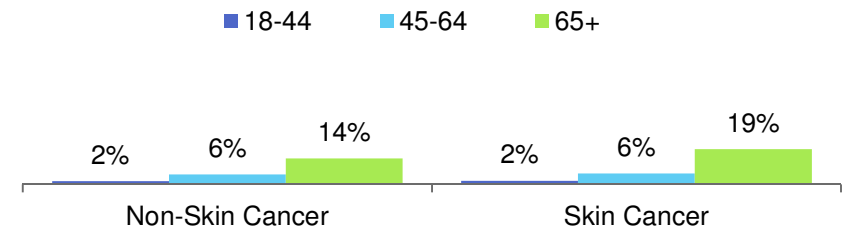
- All differences by age, for both skin and non-skin cancers are statistically significant.

There are no statistical differences in the prevalence of non-skin cancer or skin cancer by annual household income level, among Burlington adults.

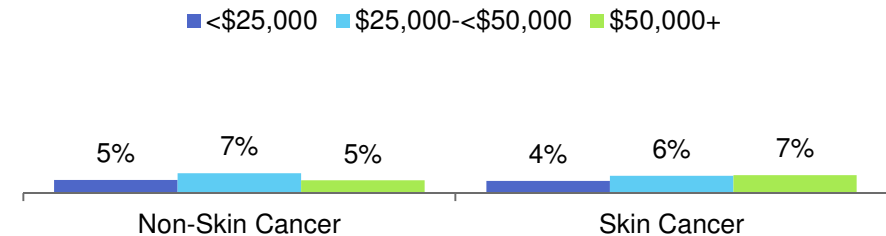
**Chronic Conditions by Gender  
Burlington Adults**



**Chronic Conditions by Age**



**Chronic Conditions by Income Level**





## Risk Behaviors

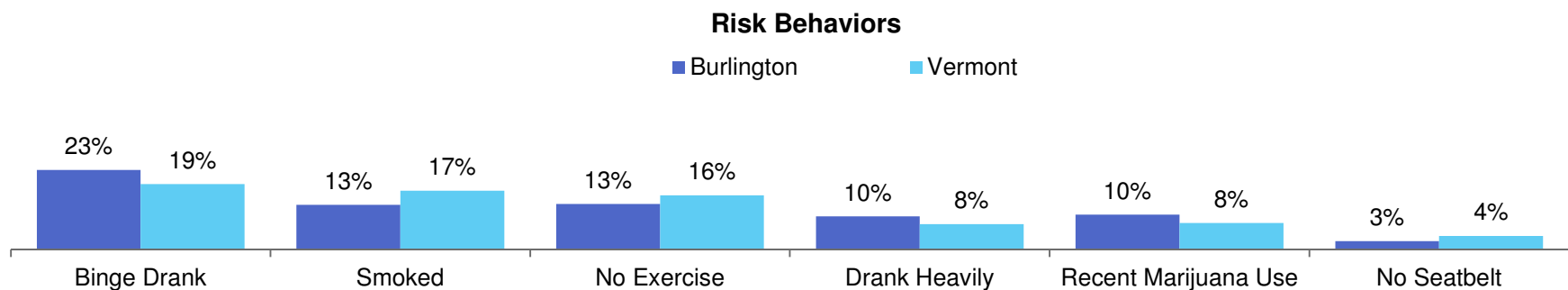
In 2011-2012, Burlington adults were significantly more likely than Vermont adults overall to report binge drinking in the past month (23% vs. 19%).

- Binge drinking was defined as five or more drinks in one sitting for men and four or more drinks for women. Heavy drinking was defined as more than two drinks per day for men and more than one for women.

Burlington area adults were significantly less likely to report currently smoking and not participating in exercise, as compared with Vermont adults.

- About one in eight (13%) Burlington adults said they currently smoke, compared with 17% of Vermont adults.
  - Of smokers, 61% tried to quit smoking at least once during the previous year. This is similar to the 62% reported among Vermont smokers.
- Thirteen percent of Burlington area adults said they did not participate in any physical activity in the last month. This is significantly lower than the 16% reported for Vermont adults overall.

Burlington area adults and Vermont adults reported similar rates of heavy drinking (10% vs. 8%), recent marijuana use (10% vs. 8%), and seldom or never wearing a seatbelt (3% vs. 4%).



Note: Smoking and exercise data are age adjusted to the U.S. 2000 standard population

## Risk Behaviors

There are no statistically significant differences by gender in smoking and not participating in physical activity, among Burlington area adults.

Smoking rates decrease with increasing age, among adults in the Burlington area.

- Adults 18-44 have the highest smoking rates and are significantly more likely to report smoking than those 65 and older (17% vs. 3%).

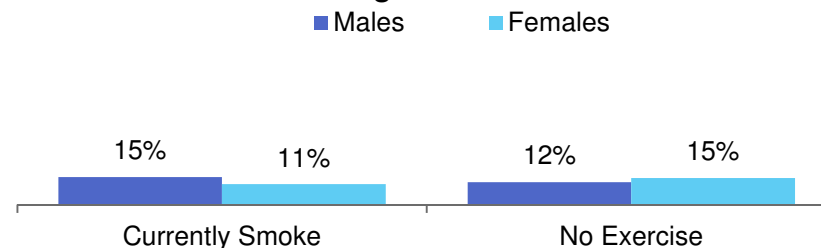
Conversely, not participating in physical activity increases with increasing age.

- Adults 65 and older are significantly more likely to not participate in physical activity than those 18-64 (22% vs. 12%).

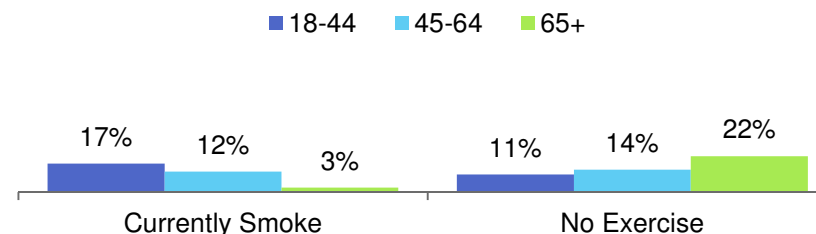
Burlington area adults in homes with more income are less likely to currently smoke and less likely to not participate in physical activity.

- Adults in homes making \$50,000 or more are significantly less likely to smoke than those in homes with less income.
- Burlington adults in homes making \$50,000 or more are also significantly less likely to report not participating in any physical activity as compared with those in homes with less income.

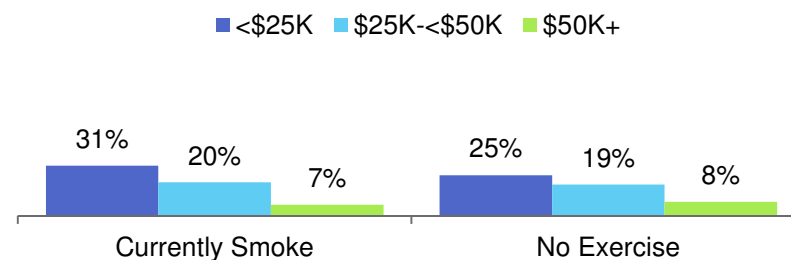
**Risk Behaviors by Gender  
Burlington Adults**



**Risk Behaviors by Age**



**Risk Behaviors by Income Level**



Note: Smoking and physical activity data, except that by age, are age-adjusted to the U.S. 2000 population.

## Risk Behaviors

About three in ten (29%) men in the Burlington area said they binge drank in the last month. This is significantly higher than the 18% reported among women.

- There are no differences in heavy drinking among Burlington area adults by gender.

Burlington area men are also significantly more likely to report recent marijuana use, compared to women (14% vs. 6%).

Binge drinking, heavy drinking and recent marijuana use all decrease with increasing age.

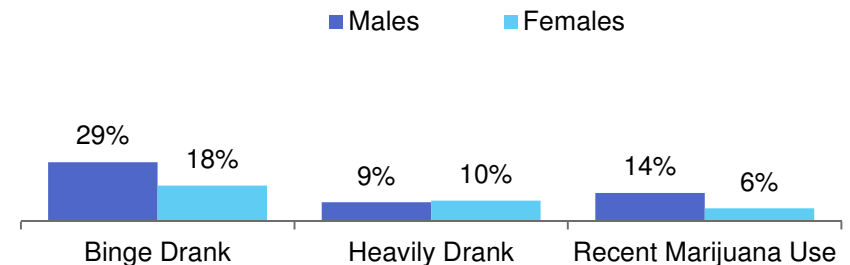
- All differences in binge drinking by age are statistically significant.
- Burlington adults 18-44 are significantly more likely to report heavy drinking than those 65 and older (12% vs. 5%).
- All differences in marijuana use by age are statistically significant.

In the Burlington area, recent marijuana use decreases with increasing annual household incomes.

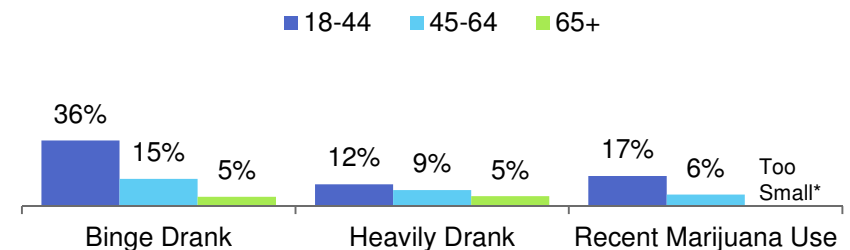
- Adults in homes making less than \$25,000 per year are significantly more likely to report using marijuana in the last month than those making \$50,000 or more per year (21% vs. 7%).

There are no differences in binge or heavy drinking among Burlington area adults with different annual household incomes.

**Risk Behaviors by Gender  
Burlington Adults**

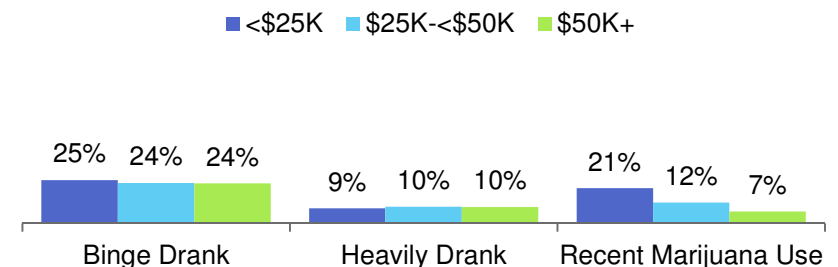


**Risk Behaviors by Age**



\*Sample size is too small to report

**Risk Behaviors by Income Level**



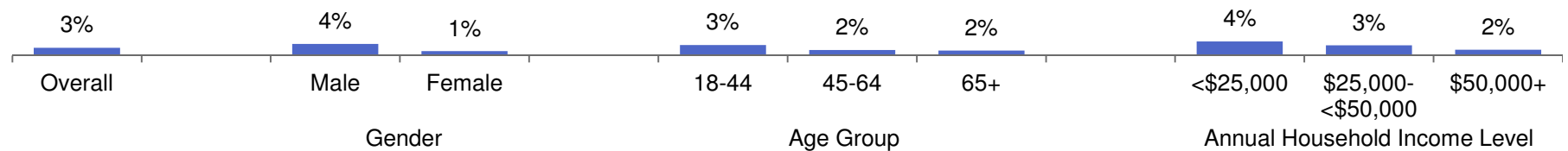
## Risk Behaviors

Overall, less than one in twenty (3%) adults in the Burlington area said they seldom or never wear a seatbelt when riding or driving in a car. This is statistically similar to the four percent of Vermont adults who reported the same.

Burlington area men and women never or seldom wear seatbelts at statistically similar rates, four percent for men and one percent for women. Adult use of seatbelts in the Burlington area also does not differ by age.

Non-use of seatbelts among Burlington area adults decreases with increasing annual household income, however the difference is not statistically significant.

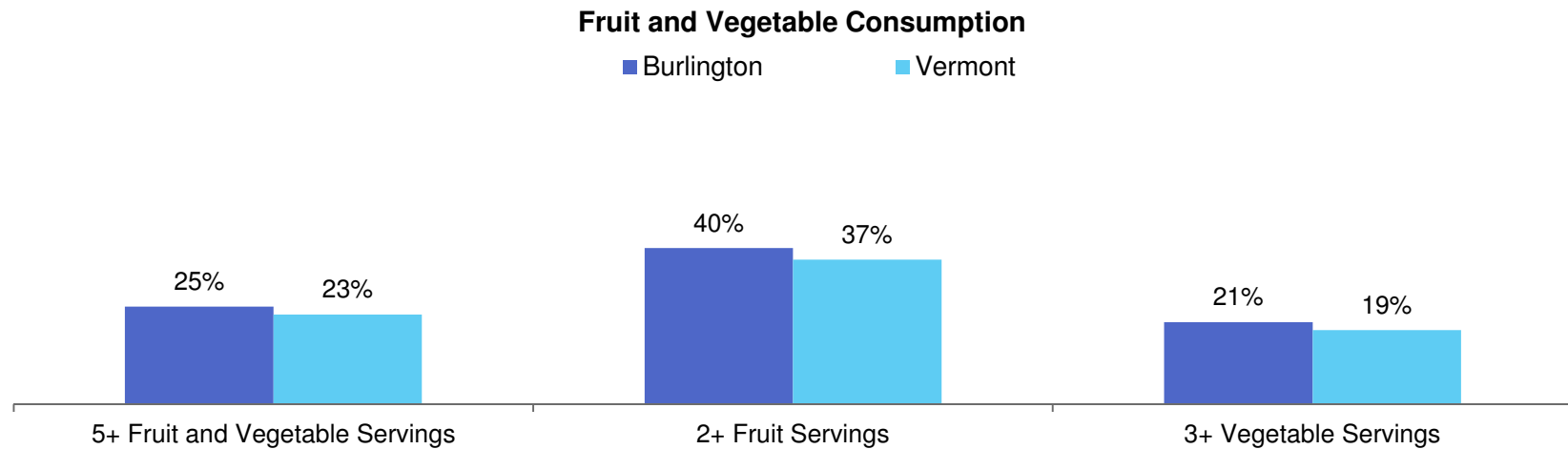
**Seldom or Never Wear Seatbelt, Overall and by Sub-groups  
Burlington Adults**



## Preventive Behaviors

In 2011, a quarter of Burlington area adults reported eating the recommended five or more fruit and vegetable servings per day. Four in ten ate two or more fruits and 21% reported eating three or more vegetable servings.

Burlington area adult consumption of fruits and vegetables was statistically similar to that among Vermont adults.



## Preventive Behaviors

Women in the Burlington area eat more fruits and vegetables than men.

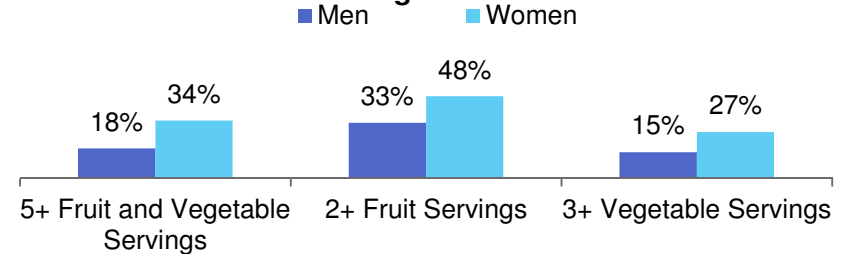
- A third of women said they eat five or more fruit and vegetable servings. This is significantly higher than the 18% reported by men.
- Almost half of women eat two or more fruits and 27% eat three or more vegetables. These are significantly higher than the 33% of men eating two or more fruits and the 15% of men eating three or more vegetables per day.

There are no differences in fruit and vegetable consumption by age, among Burlington area adults.

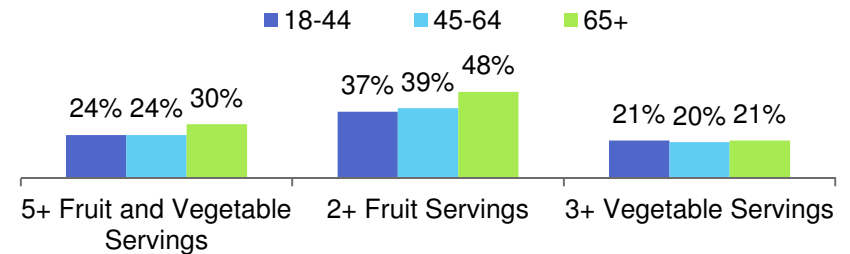
Consumption of fruits and vegetables increases with annual household income level, among Burlington area adults.

- Adults in homes making \$50,000 or more per year are significantly more likely to report eating three or more vegetables per day or five or more fruits and vegetables daily than those in homes making less than \$25,000 a year.
- There are no statistical differences in the consumption of two or more fruits by annual household income level.

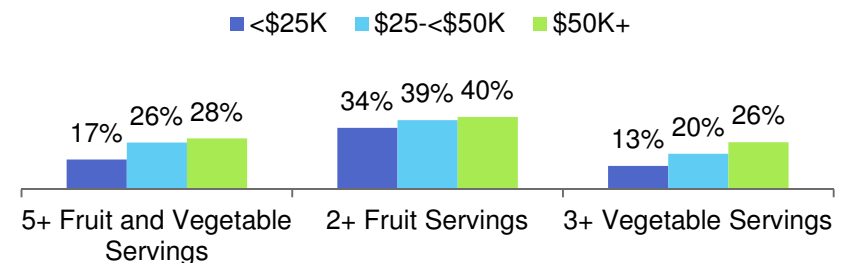
**Preventive Behaviors by Gender**  
**Burlington Adults**



**Preventive Behaviors by Age**



**Preventive Behaviors by Income Level**



Note: Fruit and vegetable data, except that by age, are age adjusted to the U.S. 2000 standard population.



## Preventive Behaviors

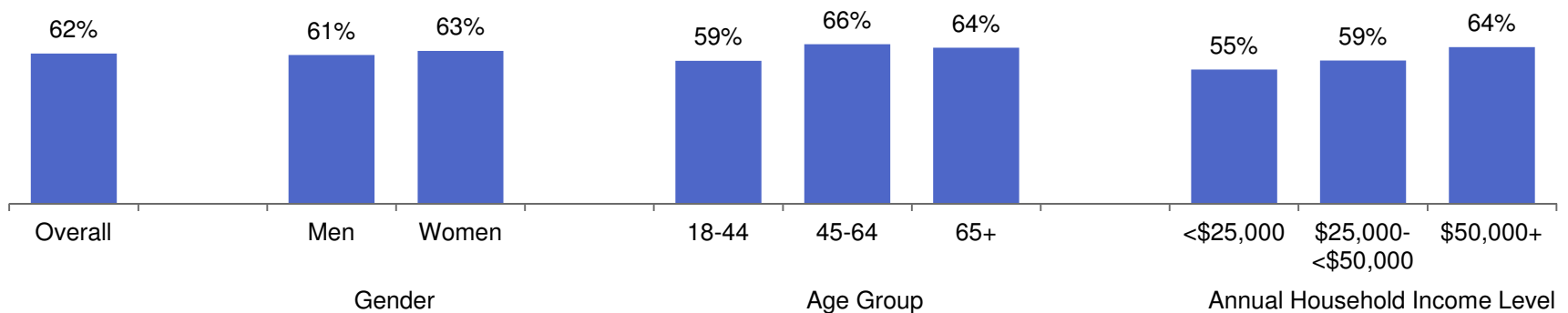
In 2011, about six in ten (59%) Vermont adults reported meeting physical activity recommendations\*. This is similar to the 62% reported among Burlington area adults.

Men and women in the Burlington area reported meeting physical activity recommendations at statistically similar rates, 61% for men and 52% for women.

There are no differences in meeting physical activity recommendations by age, among Burlington adults.

Meeting physical activity recommendations increases with annual household income level, however, there are no statistically significant differences.

**Met Physical Activity Recommendations, Overall and by Sub-groups  
Burlington Adults**



\*For adults, the CDC currently recommends they participate in 150 minutes of moderate physical activity or 75 minutes of vigorous activity per week. Strength building activities are recommended at least two times per week. For more information see:

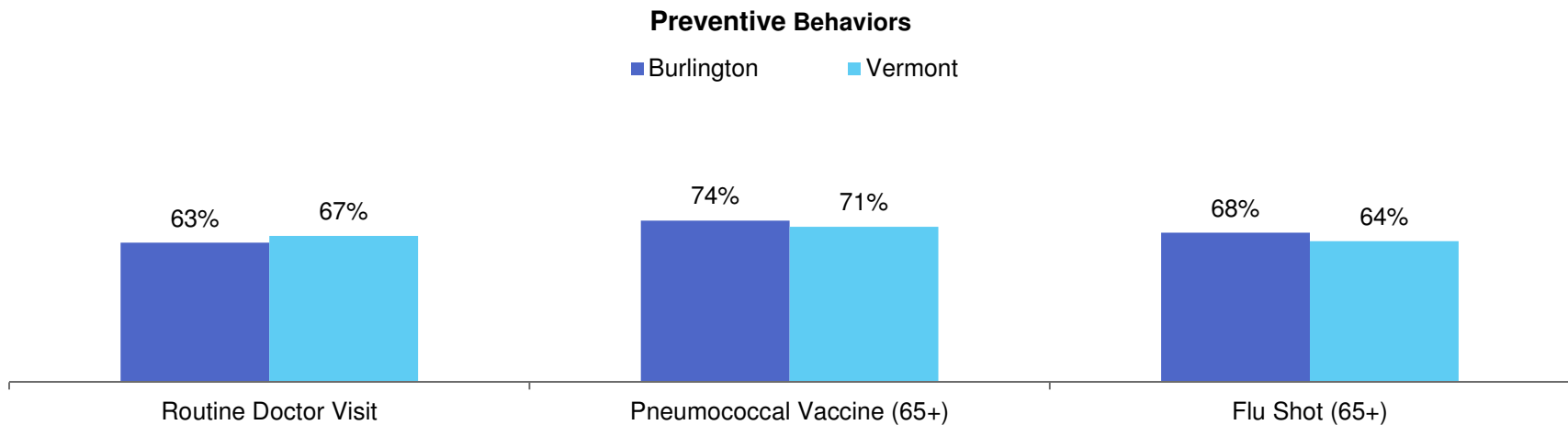
[www.cdc.gov/physicalactivity/everyone/guidelines/index.html](http://www.cdc.gov/physicalactivity/everyone/guidelines/index.html)

## Preventive Behaviors

Less than two-thirds (63%) of adults in the Burlington area said they saw their doctor for a routine visit in the previous year. This was similar to the 67% reported among all Vermont adults.

About three-quarters (74%) of Burlington area adults ages 65 and older have ever gotten a pneumococcal vaccine. Slightly fewer, 68% reported having a flu shot in the last year.

- Vermont adults, ages 65 and older reported getting pneumococcal and flu shot vaccines at similar rates to Burlington adults.



## Preventive Behaviors

Women are significantly more likely to have made a routine visit to their doctor in the last year, compared with men (70% vs. 57%), among Burlington area adults.

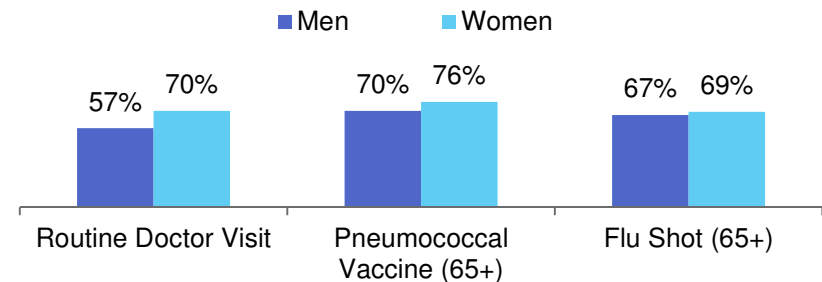
There are no differences in pneumococcal or flu shot vaccination rates by gender, among adults 65 and older who live in the Burlington area.

Routine visits to the doctor in the last year increase with age.

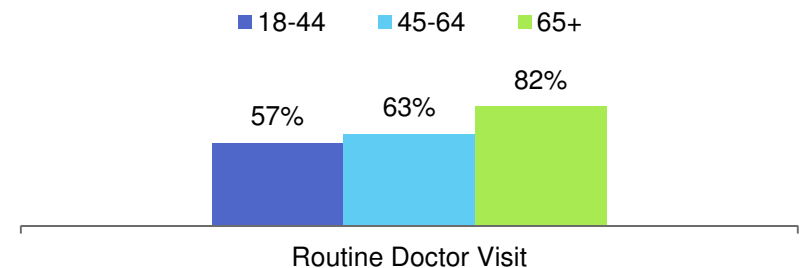
- Adults 65 and older are significantly more likely to have had a routine doctor visit than those in younger age groups.

There are no differences in the occurrence of routine doctor visits or receipt of vaccinations by annual household income level, among Burlington area adults.

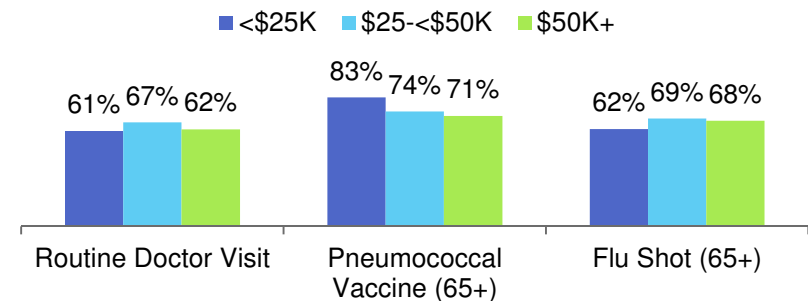
**Preventive Behaviors by Gender  
Burlington Adults**



**Preventive Behaviors by Age**



**Preventive Behaviors by Income Level**



## HIV Screening

In 2011-2012, a third of Burlington area adults had ever been tested for HIV. This is statistically similar to the 30% reported among Vermont adults overall.

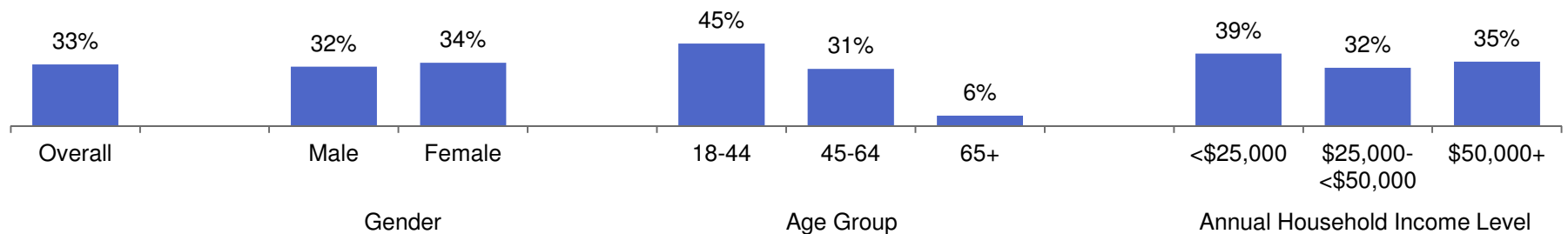
Men and women in the Burlington area report HIV testing at similar rates.

Ever having an HIV test decreases with increasing age. In other words, as adults age they are less likely to have had an HIV test.

- All differences by age are statistically significant.

There are no differences, among adults in the Burlington area, in HIV testing by annual household income level.

**Ever Had HIV Test, Overall and by Sub-Groups  
Burlington Adults**



## Cancer Screening

In 2012, eight in ten (81%) women ages 50-74 in the Burlington area reported meeting breast cancer screening recommendations. This is similar to the 82% among all Vermont women in this age group.

- The breast cancer screening recommendation is a mammogram every two years.

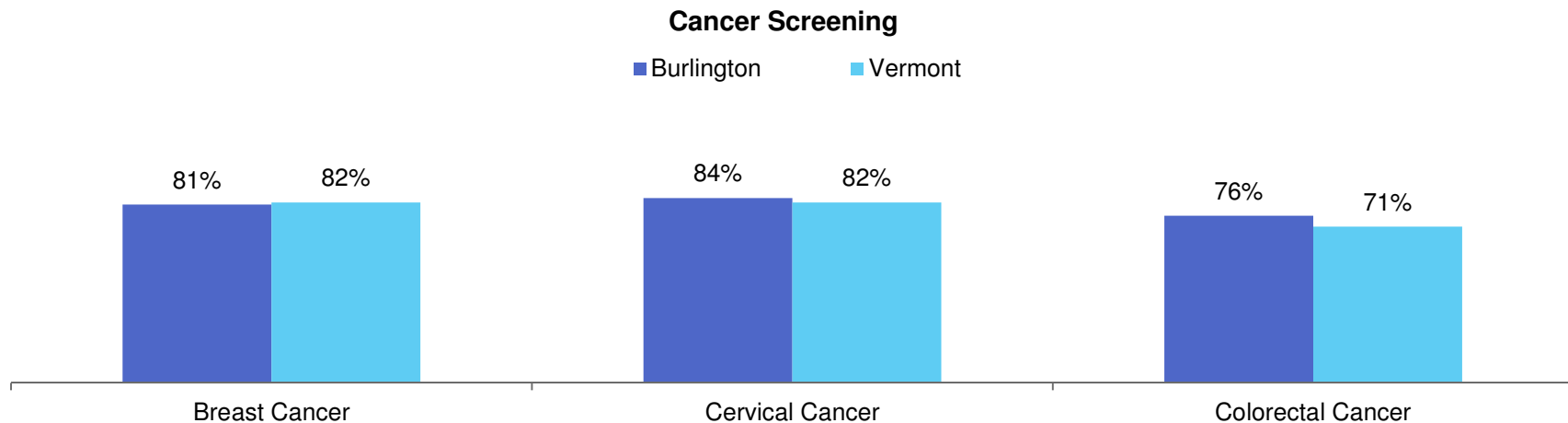
Eighty-four percent of women 21 and older who live in the Burlington area met cervical cancer screening recommendations, statistically similar to the 82% among Vermont women of the same age.

- Cervical cancer screening recommendations are for a PAP test every three years, and excludes women who have had a hysterectomy.

Among adults 50 to 75 living in the Burlington area, roughly three-quarters (76%) met colorectal cancer screening recommendations. This also is similar to the rate reported by all Vermonters of the same age (71%).

- Recommendations for screening for colorectal cancer are: a fecal occult blood test (FOBT) annually OR sigmoidoscopy ever five years and FOBT every three years OR colonoscopy ever ten years.

Data on cancer screenings are not broken out by subgroup as the screening recommendations are already limited by age and/or gender.



## Community Safety and Resources

Seven in ten Burlington area adults said they use community resources for physical activity (e.g. parks, playgrounds and sports fields). As compared with Vermont adults, those living in the Burlington area are significantly more likely to use community resources for physical activity (58% vs. 71%).

Men and women in the Burlington area use physical activity community resources at similar rates.

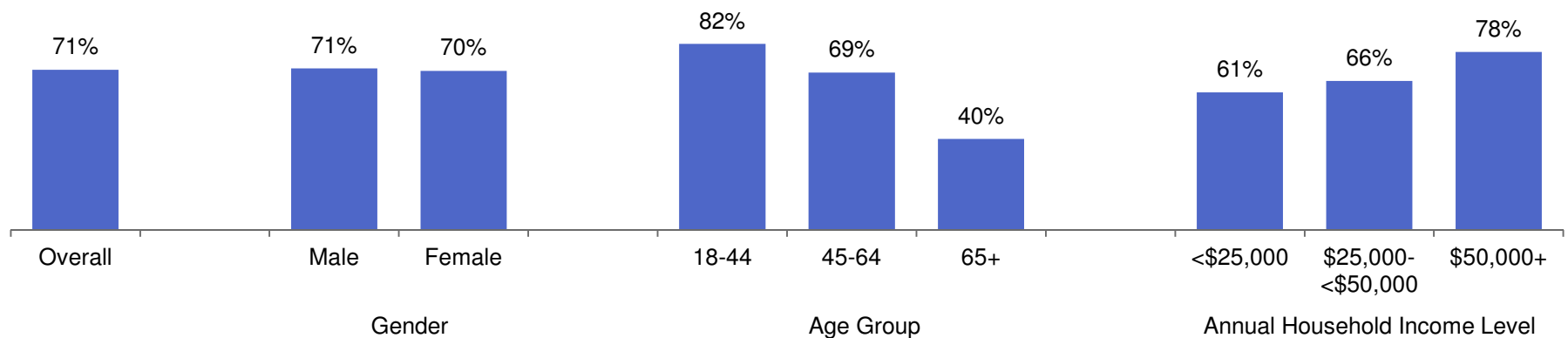
Use of community resources for physical activity decreases with increasing age.

- All differences, among Burlington adults, are significant by age.

Burlington area adults' use of community resources for physical activity increases with increasing annual household income level.

- Adults in homes making \$50,000 or more annually are significantly more likely to use community resources for physical activity than those in homes with less income.

**Use Community Resources for Physical Activity, Overall and by Sub-Groups  
Burlington Adults**





## Additional Information

Contact the BRFSS Coordinator for additional information or for BRFSS data

Jessie Hammond

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802-863-7663

Additional sub-state level data can be found on the Vermont Department of Health website

<http://healthvermont.gov/hv2020/index.aspx>

Towns included in the Burlington Health District are: Bolton, Burlington, Charlotte, Colchester, Essex, Hinesburg, Huntington, Jericho, Milton, Richmond, Shelburne, South Burlington, St. George, Underhill, Westford, Williston, and Winooski.